

Citation for 2015 Excellence in Leadership Award

Stephen T. Jackson

**Director, Southwest Climate Science Center
Climate and Land Use
Tucson, Arizona**

Mr. Steve Jackson joined the U.S. Geological Survey (USGS) in 2012 after retiring as a full professor from the University of Wyoming. He exemplifies the USGS Guiding Principles of respect, accountability, communication, valuing differences, encouragement of others, focus, and collaboration, as well as the ability to transcend cultures, by taking on the challenge of developing the Southwest Climate Science Center where he serves as Center Director. Over the past two years, Mr. Jackson has led organizational change in the development of the Center by implementing an innovative problem-solving approach to strategic planning. Through the use of scenario planning, he effectively engaged multiple cooperative partners to develop the next generation of strategic direction for the Center. The scenario planning approach he utilized encouraged the partnership to focus on a collaborative approach to make best use of the limited resources available for science. His approach to strategic planning has been adopted by other Climate Science Centers in the network which clearly reflects his ability to influence thinking.

Having spent more than 30 years in an academic setting, Mr. Jackson had limited experience working within the federal government, including the management of federal resources. Given his background, he embarked on a continual learning process to understand how to work within, and effectively manage federal projects. The Center was one of four that were audited by the Inspector General (IG) in FY2015. Mr. Jackson's commitment to learning how the federal government manages resources assured that the investigation did not find any fault with projects under his management and that his staff has a thorough understanding of climate science. His leadership in the development of partnerships was recognized as exemplary. The IG noted that they observed open communication and a willingness to work together as a team and that Mr. Jackson was a leader in the efforts to bring together the Climate Science Centers as network.

In spite of him not being classified as a Research Grade Evaluation scientist, Mr. Jackson continues to mentor post-doctoral employees and students. He is recognized internationally as an expert in paleo climate work and is currently serving as an assistant editor for Science magazine, representing his global recognition as a leader in scientific research. Mr. Jackson worked on, and published multiple scientific manuscripts over the last two years, representing his technical competence as not only a federal manager, but a world class scientist.

Mr. Jackson's ability to listen closely to group discussion, recognizing the differences and various points of view and effectively distill consensus approaches to problem solving is to be admired. With his background in academia, he can effectively recognize cultural differences between government and university science and work to find solutions that work for both cultures. For instance, Mr. Jackson worked collaboratively with partners to pull together a summit focused on, "Bridging the Gap: Collaborative Science for Adaptation Management" highlighting the work not only of the Center, but the various Federal, State, Tribal and university science. The outcomes of this summit set the stage around priority climate items for all collaborating agencies in the Southwest.

According to his staff, Mr. Jackson supports an office culture that is positive and respectful. In doing so, he engenders an atmosphere of cooperation, collaboration, and trust—all essential skills for leading teams of highly effective individuals. Moreover, he gives his staff the latitude and freedom to do their jobs without micro-management. Yet, he is always available to lend a supportive hand, provide perspective without being condescending, and to shape the decision-making context.

Nominated by:

Douglas Beard, Chief
National Climate Change and Wildlife Science Center
and
Janet Cushing, Deputy Chief
National Climate Change and Wildlife Science Center

Endorsed by:

Virginia Burkett, Associate Director for Climate and Land Use Change

Citation for 2015 USGS Early Career Excellence in Leadership Award

James M. Nelson

**Computer Engineer
Climate and Land Use
Sioux Falls, South Dakota**

Mr. James Nelson, Ground Systems Manager, Engineering and Development Team Lead, and Landsat 9 Project Manager for the Earth Resources Observations and Science (EROS) Center, has provided crucial leadership for the development and management of the Landsat Data Continuity Mission (LDCM) and subsequent missions. Landsat missions play a critical role in monitoring, understanding and managing the resources needed for human sustenance such as food, water and forests. The imagery collected by the Landsat satellite system, distributed and studied over time, has led to the improvement of human and biodiversity health, energy and water management, urban planning, disaster recovery and agriculture monitoring, all resulting in incalculable benefits to the United States and world economy.

As Ground Systems Manager, Mr. Nelson expertly managed the development of the image processing, archive and distribution system to support the LDCM mission launch. His strong technical leadership and unique ability to bring together several different organizations into a cohesive, high performance team were critical to the successful development and launch of Landsat 8. Demonstrating exceptional interpersonal skills, he forged solid relationships with collaborators in what was a highly complex matrix of roles and responsibilities at various levels within the U.S. Geological Survey (USGS), the National Aeronautics and Space Administration (NASA), and the National Oceanic and Atmospheric Administration (NOAA). The strength of these relationships was critical to work through problems and overcome daunting obstacles including a \$40 million budget shortfall for LDCM implementation which threatened the entire mission. Demonstrating exceptional determination, patience and resourcefulness, Mr. Nelson worked with his team, interagency collaborators, and commercial companies to successfully implement a redesigned satellite ground system architecture that brought the project within the budget and allowed the mission to continue.

To meet the growing demand for engineering expertise, he recruited and nurtured a geographically dispersed, but constantly connected team of engineers, greatly enhancing the diversity and depth of specialized skills available within the EROS workforce.

Known for his leadership abilities, Mr. Nelson was selected to lead several key initiatives important to the future of EROS and the USGS in addition to his normal duties. As the USGS lead for the joint NASA/USGS Sustainable Land Imaging Architecture Study Team (AST), he provided technical direction to ensure the future of

Landsat aligned with USGS interests. Throughout the effort he kept EROS and USGS management informed and engaged. Mr. Nelson's leadership in defining the future of the Landsat Program benefited not only the USGS, but also the Department, NASA, and the entire land remote sensing community.

In 2014, Mr. Nelson was appointed to co-lead the EROS Architecture Study Team (EAST), tasked with transforming the future of EROS by tying infrastructure investment planning to the EROS strategic plan in a cohesive and cost-effective way. The EAST tackled the challenge of ensuring consistent service and growth potential in light of the Office of Management and Budget Federal Data Center Consolidation Initiative and EROS missions. A daunting and complex undertaking, Mr. Nelson addressed the realities of a diversified customer-base, information technology security vulnerabilities, and constantly changing technological advancements.

As the Engineering and Development Team Lead and Landsat 9 Project Manager, Mr. Nelson and his team are currently formulating the next Landsat mission--Landsat 9, to ensure EROS continues to provide the vital scientific information decision makers need to make policy and earth resource management decisions. He expertly manages a nearly \$20 million annual budget in accordance with Capital Planning and Investment Controls processes and Earned Value Management best practices. Once again, his leadership expertise has set the groundwork for another successful partnership in Earth observing system development.

Mr. Nelson's outstanding leadership achievements are demonstrated by these activities as well as his accomplishments over his five-years as a federal employee of the USGS. Mr. Nelson demonstrates and integrates the USGS Guiding Principles to support engineering excellence. For his unparalleled leadership and contributions to the successful development of the Landsat missions of the USGS, Mr. Jim Nelson is most deserving of the Early Career Excellence in Leadership Award.

Nominated by:

EROS Observing Systems Engineering and Development Team:
Brian Sauer, Chris Engebretson, Grant Mah, Ron Morfitt, Aaron Replogle, Jason Williams, and Jennifer Lacey

Supported by:

John Hahn, Supervisor

Endorsed by:

Virginia Burkett, Associate Director for Climate and Land Use Change